What is claimed is:

1. A fluid dynamic bearing motor comprising an inner and outer member defining a gap therebetween, and supported for relative rotation by a grooved corner bearing facing the gap comprising first and second adjacent grooved surfaces at an angle to each other at a corner, the grooved surfaces configured to pump fluid in the gap toward the corner.

2. A fluid dynamic bearing motor as claimed in claim 1 wherein at least one of the grooved surfaces is parallel to or perpendicular to a spin axis of rotation of one of the elements.

3. A fluid dynamic bearing motor as claimed in claim 2 including a magnetic bias circuit for maintaining relative axial positioning.

4. A fluid dynamic bearing motor as claimed in claim 1 wherein at least one of the grooved surfaces comprises at least one relief extending through the grooved portion of the surface.

5. The fluid dynamic bearing motor of claim 4 further including a plurality of reliefs disposed around the bearing surface.

6. A fluid dynamic bearing motor as claimed in claim 5 wherein the reliefs have sufficient depth to allow fluid circulation flow through the reliefs.

7. A fluid dynamic bearing motor as claimed in claim 5 wherein the reliefs extend parallel to the groove pattern from one edge of the groove pattern to a second edge.

8. A fluid dynamic bearing motor as claimed in claim 4 wherein the at least one relief extends across the groove portion of each of the first and second grooved surfaces.

9. A fluid dynamic bearing motor as claimed in claim 2 wherein the inner member comprises a thrust plate and the outer member comprises a hub, the first and second grooved surfaces defining a thrust bearing and a journal bearing on a radial surface of the thrust plate to support the hub for rotation.

10. The fluid dynamic bearing motor of claim 9 further comprising a plurality of reliefs, extending across the groove thrust bearing surface of the thrust plate, each of the reliefs being aligned with at least one of the reliefs extending across the grooved journal bearing surface.

11. A fluid dynamic bearing motor as claimed in claim 9 further including at least one recirculation hole extending between upper and lower surfaces of the thrust plate.

12. A fluid dynamic bearing motor as claimed in claim 9 wherein the gap between the thrust plate and the hub which defines the journal bearing and the thrust bearing continues around the second axial surface of the thrust plate, each end of the gap defined between the hub and the thrust plate and a sleeve and the thrust plate ending in a capillary seal.

13. A fluid dynamic bearing motor comprising a shaft having a first end adapted to be supported from a base, a thrust plate supported from or integrated with an end of the shaft distal from the first end, a hub supported for rotation over the shaft and thrust plate, and a fluid dynamic bearing between the thrust plate and the hub wherein the fluid dynamic

bearing comprises a grooved journal bearing on an outer radial surface of the thrust plate and a grooved thrust bearing formed on an axially outer surface of the thrust plate, the grooved journal bearing and the grooved thrust bearing configured to pump fluid toward a corner.

14. A fluid dynamic bearing motor comprising a shaft from a first end adapted to be supported from a base, a thrust ring supported from a end of the shaft distal from the base and a hub supported for rotation relative to the shaft and thrust ring, and a fluid dynamic bearing between the thrust ring and the hub wherein the fluid dynamic bearing comprises a grooved journal bearing on an inner radial surface of the thrust ring and a grooved thrust bearing on an axial surface of the thrust ring, the grooved journal bearing and the grooved thrust bearing configured to pump fluid toward a corner.

15. A fluid dynamic bearing motor comprising a shaft having a first plate supported at or near a first end and a second plate supported at or near a second end, a hub supported for rotation relative to the shaft and plates, and a fluid dynamic bearing supporting the hub for rotation relative to the shaft, the fluid dynamic bearing comprising a journal bearing defined by grooves on one of the surfaces defining a gap between the shaft and the hub, and a thrust bearing defined on a surface between one of the first and second plates and the hub, the journal bearing and the thrust bearing being configured to pump fluid toward a corner.

16. A fluid dynamic bearing motor as claimed in claim 15, further comprising a fluid recirculation path extending axially from a gap between the hub and a surface of the first plate to a gap between the hub and the surface of the second plate, a radial capillary seal defined adjacent the fluid recirculation path for maintaining fluid in the fluid bearing system and

for allowing the escape of air bubbles from the fluid dynamic bearing, and a capillary seal adjacent the second end of the axial fluid recirculation path.

17. A fluid dynamic bearing motor comprising a shaft adapted to be supported from a base, a conical bearing comprising first and second angled surfaces sloping away from the shaft and meeting at a corner distal from the shaft, a hub and a sleeve supported for rotation around the shaft and the conical bearing, each of the hub and the sleeve having a surface which cooperates at least in part with one of the angled surfaces of the cone to define a gap, fluid in the gap supporting the hub and sleeve for rotation around the shaft, each of the gaps defined by the angled surfaces and the facing surfaces of the hub and sleeve having grooves on at least one surface thereof to pump fluid toward the corner so that both of the angled surfaces are inclined relative to a spin axis of the hub and sleeve.

18. A fluid dynamic bearing motor as claimed in claim 17 further comprising one or more fluid circulation paths interior to the angled surfaces of the conical bearing to provide and maintain fluid over the conical bearing gap.